

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously presented) A method for enhancing somatic recombination comprising promoting the homologous recombination of somatic cells in which DNA homologous recombination at a genetic locus is occurring by relaxing the chromatin structure of chromosomes in said somatic cells.
2. (Currently amended) An antibody production method comprising enhancing DNA homologous recombination at an antibody locus when producing antibodies from immunocytes in which DNA homologous recombination is occurring at the antibody locus, by relaxing the chromatin structure of chromosomes in said immunocytes, and thereby obtaining diverse antibodies.
3. (Previously presented) The method described in Claim 1, wherein the relaxation of the chromatin structure of chromosomes is induced by putting cells into contact with histone deacetylase inhibitor.
4. (Previously presented) The method described in Claim 3, wherein the inhibitor is trichostatin A.
5. (Previously presented) The method described in Claim 4, wherein the treatment concentration of trichostatin A is from approximately 0.5 ng/ml to approximately 5.0 ng/ml, and the contact treatment time is from approximately 2 weeks to approximately 6 weeks.
6. (Previously presented) The methods described in Claim 1 wherein the cells are DT40 culture cells.
7. (Previously presented) Immunocytes for which somatic homologous recombination has been promoted at a genetic locus by the method described in Claim 1.

8. (Previously presented) Diverse antibodies produced by the method described in Claim 2.

9. (Original) The antibodies described in Claim 8, wherein the produced antibody is IgM.

10. (Previously presented) A medicinal agent for the promotion of somatic homologous recombination at a genetic locus, and comprising a histone deacetylase inhibitor.

11. (Original) The medicinal agent described in Claim 10, wherein the inhibitor is trichostatin A.

12. (Previously presented) The method described in Claim 2, wherein the relaxation of the chromatin structure of chromosomes is induced by putting cells into contact with histone deacetylase inhibitor.

13. (Previously presented) The method described in Claim 12, wherein the inhibitor is trichostatin A.

14. (Previously presented) The method described in Claim 13, wherein the treatment concentration of trichostatin A is from approximately 0.5 ng/ml to approximately 5.0 ng/ml, and the contact treatment time is from approximately 2 weeks to approximately 6 weeks.

15. (Previously presented) The methods described in Claim 2 wherein the cells are DT40 culture cells.

16. (New) A method for producing an antibody which can bind to said target antigen, comprising:

- i) enhancing DNA homologous recombination at an antibody locus in immunocytes in which DNA homologous recombination is occurring at said antibody locus by relaxing the chromatin structure of chromosomes in said immunocytes, whereby diverse immunocytes are obtained;

- ii) preparing a target antigen;
- iii) contacting said immunocytes with said target antigen;
- iv) selecting an immunocyte producing an antibody which can bind to said target antigen; and
- v) culturing said immunocyte.